

What is claimed is:

- 1 1. A method for communications resource allocation for  
2 a wireless communications system having a total system  
3 bandwidth, comprising the steps of:  
4 dividing a service area into a plurality of  
5 sectors;  
6 positioning a first set of base station antennas  
7 within a first set of sectors, said first set of  
8 antennas having main beams set at a first set of angles,  
9 and where each antenna of said first set of antennas  
10 corresponds to a sector within said first set of  
11 sectors;  
12 positioning a second set of base station antennas  
13 within a second set of sectors adjacent to said first  
14 set of sectors, said second set of antennas having main  
15 beams set at a second set of angles, and where each  
16 antenna of said second set of antennas corresponds to a  
17 sector within said second set of sectors; and  
18 assigning each sector in said first and second set  
19 of sectors a portion of the total system bandwidth.
- 1 2. The method of claim 1, wherein said first set of  
2 angles are 30 degrees, 150 degrees and 270 degrees, and  
3 said second set of angles are 90 degrees, 210 degrees  
4 and 330 degrees.
- 1 3. The method of claim 2, wherein beamwidths for said  
2 first and second set of antennas are within a range of  
3 50 degrees to 70 degrees.
- 1 4. The method of claim 1, wherein said each angle of  
2 said second set of angles is 60 degrees apart from each  
3 angle of said first set of angles.

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1 9. The apparatus of claim 8, wherein beamwidths for  
2 said first and second set of antennas are within a range  
3 of 50 degrees to 70 degrees.

communicating signals over a second set of base station antennas within a second set of sectors adjacent to said first set of sectors, said second set of antennas having main beams set at a second set of angles, and where each antenna of said second set of antennas corresponds to a sector within said second set of sectors.

Descriptive Statistics		ANOVA		Post Hoc		Correlation		Regression	
Variable	Mean	Sum of Squares	df	Mean Square	F	Significance	Partial Correlation	Adjusted R Square	Standard Error
Dependent Variable									
Independent Variable									
Control Variable									
Interaction Term									
Quadratic Term									
Cubic Term									
Quartic Term									
Quintic Term									
Sixth Degree Term									
Seventh Degree Term									
Eighth Degree Term									
Ninth Degree Term									
Tenth Degree Term									
Eleventh Degree Term									
Twelfth Degree Term									
Thirteenth Degree Term									
Fourteenth Degree Term									
Fifteenth Degree Term									
Sixteenth Degree Term									
Seventeenth Degree Term									
Eighteenth Degree Term									
Nineteenth Degree Term									
Twentieth Degree Term									
Twenty-first Degree Term									
Twenty-second Degree Term									
Twenty-third Degree Term									
Twenty-fourth Degree Term									
Twenty-fifth Degree Term									
Twenty-sixth Degree Term									
Twenty-seventh Degree Term									
Twenty-eighth Degree Term									
Twenty-ninth Degree Term									
Thirtieth Degree Term									
Thirty-first Degree Term									
Thirty-second Degree Term									
Thirty-third Degree Term									
Thirty-fourth Degree Term									
Thirty-fifth Degree Term									
Thirty-sixth Degree Term									
Thirty-seventh Degree Term									
Thirty-eighth Degree Term									
Thirty-ninth Degree Term									
Fortieth Degree Term									
Forty-first Degree Term									
Forty-second Degree Term									
Forty-third Degree Term									
Forty-fourth Degree Term									
Forty-fifth Degree Term									
Forty-sixth Degree Term									
Forty-seventh Degree Term									
Forty-eighth Degree Term									
Forty-ninth Degree Term									
Fiftieth Degree Term									
Fifty-first Degree Term									
Fifty-second Degree Term									
Fifty-third Degree Term									
Fifty-fourth Degree Term									
Fifty-fifth Degree Term									
Fifty-sixth Degree Term									
Fifty-seventh Degree Term									
Fifty-eighth Degree Term									
Fifty-ninth Degree Term									
Sixtieth Degree Term									

1 15. An apparatus for a wireless communications system  
2 having a service area divided into a plurality of  
3 sectors, comprising:  
4 a switching network to provide switching for a  
5 plurality of base stations;  
6 a first set of base stations operably coupled to  
7 said switching network for receiving signals over said  
8 network, said first set of base stations having antennas  
9 within a first set of sectors, said antennas having main  
10 beams set at a first set of angles, and where each  
11 antenna corresponds to a sector within said first set of  
12 sectors;  
13 a second set of base stations operably coupled to  
14 said switching network for receiving signals over said  
15 network, said second set of base stations having  
16 antennas within a second set of sectors adjacent to said  
17 first set of sectors, said antennas having main beams  
18 set at a second set of angles, and where each antenna  
19 corresponds to a sector within said second set of  
20 sectors; and  
21 transceivers operably coupled to said antennas for  
22 communicating said signals over said main beams for said  
23 antennas.